SENATE AGRICULTURE
EXHIBIT NO. 3
DATE 2-10-2009
BILL NO. SB 343

Written Testimony in Favor of Senate Bill 343, 2009

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I am here to speak in favor of Senate Bill 343. As a board member for the Flathead Lakers organization I represent 1500-2000 persons interested in the welfare of Flathead Lake. On as personal note I grew up in Dayton on the lake and have considered it my "true" home for nearly 60 years.

I have a BA degree in chemistry from the University of Montana, and I earned a doctorate in chemistry from Washington State University in 1968. The bulk of my professional career was spent directing the work of the environmental health laboratory for the Michigan Department of Public Health and acting as scientific consultant for our Environmental Health Division. As a part of this work I came to know the zebra mussel very well and I think it presents the greatest current threat to Montana waters. I also believe that a program to prevent the spread of the zebra mussel will be effective against many other invasive species.

Based on my observations in Michigan, zebra mussels are a potential invasive species that has a well demonstrated ability to:

Destroy lake or river bottom ecologies
Damage the normal food chain
Promote aquatic weed growth
Change the nature and populations of fisheries
Damage industries and utilities using surface water.
Damage boating and recreational equipment
Degrade recreational quality and discourage tourism
Add large maintenance costs to many phases of the economy

Each of these aspects alone could be considered *serious problem*. Taken together on a statewide basis, they represent *disastrous consequences*.

About the time I was feeling very glad that Montana was a long way from Michigan, we began to see the uncontrolled spread of zebra mussels to Michigan's inland lakes (SEE LIST, *Inland lakes Infested with Zebra Mussels by County*). The listed lakes are upstream of the Great Lakes and should not be affected by normal spread of mussels. Relative to a single contamination incident in the Great Lakes in 1986 the first inland lake infestation wasn't discovered until 1991. Five years later zebra mussels had been

found in 42 inland lakes, and by 2001 166 lakes were contaminated. Circumstance strongly suggests that nearly all of these lakes were contaminated by human transport of mussels to the lakes.

Finally, I bring to you attention the current national map for zebra mussel distribution data (SEE MAP, provided by USGS). The map data points shows the expected movement around the Great Lakes shorelines given shipping and other boat movement. Zebra mussels have also been transported to some Minnesota lakes and to the headwaters of the Mississippi. This has assured eventual downstream movement throughout the Mississippi river basin. The Flathead Lakers have noted that if our lake is colonized, it would lead to eventual infestation of the entire Columbia River basin. From the Mississippi, zebra mussels have begun to be transported back up the Missouri toward Montana. In addition, the green map data points represemt a similar type of mussel, the quagga. This is new to the southwest and poses problems similar to the zebra mussel. The map shows that zebra mussels have moved about half the way from Michigan to Montana, and are now about a day's drive away from the Montana border.

In general, I would hope that legislators recognize two things:

The first is just how serious and imminent this problem has become and how difficult it would be to control within the state. Adequate concern must be encouraged within the pertinent departments and resources needed to respond to this threat must be provided to them.

Secondly, if zebra mussels do come to our state, it is almost certain it will be because ignorant, careless, or totally self-centered individuals have transported them. If this bill does nothing else, it must stop that transport of zebra mussels or other species to our waters.

Senate Bill 343 certainly raises awareness and appears to provide departments with the authorizations and procedures needed to address the potential for zebra mussel contamination and other invasive species. My organization and I fully support this bill.

My only strong concern is with Section 11, part (2). Inspection for aquatic invasive species, including the zebra mussel, requires access to any parts of a watercraft that may actually contain contaminated water being transported from other states. That may include the bilge, bait wells, or engine coolant water systems. It is not clear that this access would be allowed under the current wording.

In closing my statement, I want to thank the committee for the chance to speak on behalf of this bill and for your efforts in addressing this issue. The Flathead Lakers will do whatever we can to support its passage and to ultimately implement its provisions.

Inland Lakes Infested with Zebra Mussels by County

(Year Discovered in Parentheses)

Alcona County
Alcona Pond (00)
Allegan County
Lake Allegan(97)
Alpena County
Four Mile L. (98)
Long Lake (99)
Seven Mile (98)
Antrim County
* Birch Lake (01)
Clam Lake (00)
Six Mile Lake (99)
Barry County
Gun Lake (98)
Payne Lake (00)
Benzie County
Bass Lake (00)
Crystal Lake (98)
Loon Lake (00)
Otter Lake (00)
Platte Lake (00)
Up.Herring (96)
Berrien County
L. Paw Paw (93)
Branch County
Coldwater L (98)
Craig Lake (00)
* L. o' t' Woods (01)
Marble Lake (98)
Matteson L. (00)
Messenger L. (00)
Morrison L. (00)
North Lake (00)
Randall Lake (00)
South Lake (00)
Union Lake (99)
Calhoun County
Duck Lake (98)
Cass County
Baldwin Lake(98)
Birch Lake (00)
Christiann L. (92)
Diamond L (95)
Donnell Lake(95)
Eagle Lake (91)
* Finch Lake (01)
Indian Lake (98)
Juno Lake (92)
* Long Lake (01)
Magician L. (97)
Twin L. N. (98)
Twin L. S. (98)

Charlevoix County
Walloon Lake (93)
Cheboygan C'nty
Burt Lake (93)
Mullet Lake (98)
Clare County
Long Lake (99)
Windover L. (99)
Dickinson County
* Antoine Lake(01)
Eaton County
Mud Lake (99)
Emmett County
Crooked Lake (93)
Paradise Lake (93)
Pickerel Lake (93)
Genesee County
Fenton Lake (97)
Holloway Res. (95)
Mott Lake (98)
Lake Ponemah (00)
Silver Lake (00)
Gladwin County
Second Lake (98)
Smallwood L. (98)
Wixom Lake (97)
Grand Traverse Co.
Arbutus Lake (00)
Duck Lake (00)
Fife Lake (00)
Green Lake (00)
Silver Lake (00)
Hillsdale County
Baw Beese L. (97)
Ingham County
Lake Lansing (95)
Ionia County
Morrison Lake (99)
Iosco County
Cooke (98)
Foote Pond (98)
* Long Lake (01)
Iron County
* Fortune Pond (01)
Jackson County
Ackerson Lake(99)
Big Portage L. (98)
Clark Lake (94)
Columbia L. (97)
Pleasant L. (95)
Vineyard Lake (92)
Wampler Lake (94)

Kalamazoo County
Gull Lake (94)
Kent County
Blue Lake (99)
Dean Lake (98)
Lincoln Lake (99)
Lapeer County
* Neppesing L. (01)
Leelanau County
L. Leelanau (97)
Lenawee County
Devils Lake (94)
Evans Lake (98)
Sand Lake (96)
Livingston County
Chemung L. (98)
* E. Crooked L.(01)
* Ore Lake (01)
Rush Lake (00)
* Sandy Bottom (01)
School Lake (01)
Strawberry L. (97)
Manistee County
Bear Lake (00)
Tippy Dam L.(97)
Mason County
Ford Lake (00)
Hackert Lake (00)
Mecosta County
Bergess (98)
Blue Lake (97)
Mecosta Lake (97)
Round Lake (97)
Midland County
Sanford L. (98)
Montcalm County
Derby (98)
Whitefish L. (98)
Muskegon County
* Big Blue L. (01)

Oakland County
Big Lake (99)
Brendl e L. (00)
Cass Lak e (93)
Cedar (Strgy) (98)
Cedar Island (99)
Clear (Strgy) (98)
Commerce L.(98)
* Crescent L. (01)
Crystal Lake (00)
Duck Lake (98)
Elizabeth L. (94)
* Greens (01)
Kent Lake (94)
* L. Angelus (01)
L. Oakland (98)
Lake Orion (00)
Lakeville L. (95)
Long (Strgy) (98)
Loon Lake (93)
Lower Straits (99)
Lower Trout (98)
Maceday L. (97)
Mid. Straits (99)
Orchard L. (94)
Otter L. (94)
Oxbow Lake (99)
Pine Lake (97)
Pontiac Lake (00)
Schoolhouse (96)
Silver Lake (94)
Squaw Lake (98)
Stony Cr. Imp.(95)
Sylvan L. (94)
Tan (Stringy) (98)
Union Lake (97)
Upper Straits (97)
Van Norman (98)
Walled Lake (93)
Walnut Lake (99)
Watkins Lake (95)
White Lake (97)
Wolverine L.(99)
Woodhull L. (99)

Oceana County
McLaren L. (99)
Silver Lake (98)
Roscommon County
* Higgins Lake (01)
L. St. Helen (94)
Houghton L. (93)
St. Joseph County
Klinger Lake (96)
Van Buren County
Banksons (98)
Cedar Lake (98)
Gravel Lake(97)
L. o't Woods (96)
Saddle Lake (98)
Washtenaw County
Barton Pond (94)
Base Line (95)
Portage Lake (94)
Whitmore (94)
Wayne County
Belleville L. (93)

*** Newly Confirmed in 2001**

44 Counties
166 Lakes

Source:
Michigan Sea Grant
Inland Lakes
Zebra Mussel
Infestation
Monitoring Program,
December 2001

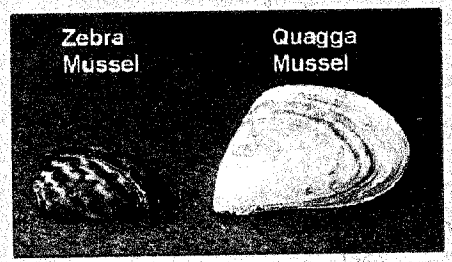
www.msu.msue.edu/seagrant/zmfiles/lake011402.html

Note: Michigan Sea Grant excludes lakes that have direct connections with or have outlets within one mile of a Great Lake. Thus lakes such as Charlevoix, Hamlin, Manistee, White and others are not listed here nor included in the count of 166 infested "Inland Lakes" although they are known to have zebra mussels.

USGS
science for a changing world

Zebra and Quagga Mussel Sightings Distribution

Dreissena polymorpha and D. rostriformis bugensis



- Zebra mussel occurrences
- Quagga mussel occurrences
- Both species occurrences
- Mussels trailered overland on boat hulls

Map produced by the U.S. Geological Survey, Gainesville, Florida, February 4, 2009.

FLATHEAD LAKE
Monitor
Newsletter of the Flathead Lakers

Flathead Lake, Montana — Winter, 2009

Proposed Bill Would Help Thwart Zebra Mussel Invasion

A new proposal addressing the threat of invasive species will come before the Montana Legislature this year. Sponsored by Senator Verdell Jackson of Kalispell, the bill's purposes include:

- preventing the introduction of new, harmful, invasive species into Montana;
- controlling and preventing the spread of harmful, invasive species within the state; and
- coordinating public and private efforts and expertise to combat invasive species.

This legislation would complement and strengthen current invasive species education and prevention efforts. The Flathead Lakers assign a high priority to preventing the introduction of harmful aquatic invaders. Lakers board member Ted Williams serves on a committee that has worked on the proposed legislation for over a year.

Flathead Lakers board members met with local legislators in early December to discuss the upcoming session. We encouraged them to support an invasive species bill that effectively protects Flathead and Montana waters from harmful invaders like the zebra mussel.

Aquatic invasive species pose a growing threat to Montana's streams, rivers and lakes. Harmful invaders have devastated water bodies in the Great Lakes states and other areas, costing utilities, municipalities and other water users millions of dollars. The U.S. Geological Survey estimates that $5 billion has been spent in the Great Lakes Basin alone for damages caused by and control efforts for the zebra mussel.

A close relative of the zebra mussel, the quagga mussel, has now established colonies west of the Mississippi River. Discovered in Lake Mead in 2007, quaggas have spread to other reservoirs in the southwest and the Colorado River.

Zebra and quagga mussels displace native species, degrade biodiversity including fisheries, clog water pipes, and coat boat motors and any structures in the water. Preventing the introduction of these species is far more cost effective than trying to control them after they appear.

Aquatic invaders can easily be transported on boats being hauled from one water body to another and can withstand extended periods of time out of the water or in very little water.

Zebra mussels coat a steel pipe. Keeping the mussels and other invasive aquatic species out of Flathead waters is a top priority for the Lakers. *Photo courtesy of MT FWP.*

Commenting on an early draft of the legislation, Ted Williams said "I strongly believe that barriers to the spread of aquatic invasive species should be included in the legislation. We need to block organisms such as zebra mussels from coming into the state." An inspection program for watercraft entering the state is an important tool to accomplish this goal, and the Flathead Lakers encourage legislators to authorize and fund inspection stations now – before it is too late.

— *Robin Steinkraus*

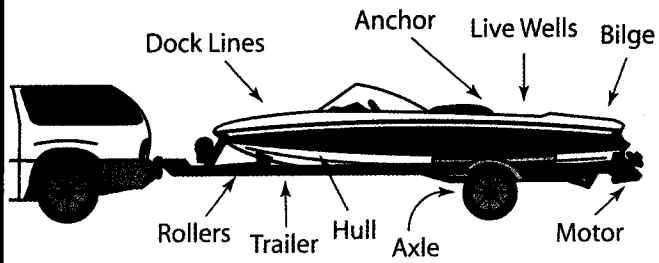
Our website has links to this bill & associated committees.

INSIDE

Visit our web site!
www.flatheadlakers.org

Before Launching...
Before Leaving...

Inspect Everything!



CAUTION

The Federal Lacey Act lists Zebra Mussels as injurious wildlife and prohibits their importation and transportation across state lines.

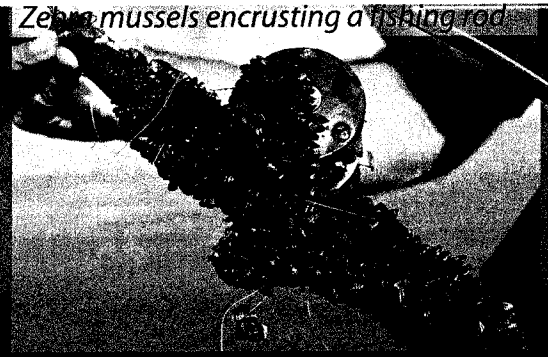
Follow these simple steps:

* Remove any visible mud, plants, fish or other animals before transporting equipment
* Eliminate all water from your boat and equipment before transporting anywhere
* Clean and dry everything that came in contact with water (including boats, trailers, equipment, clothing, dogs, etc.)
* Never release plants, fish or other animals into a body of water unless they came from that same body of water

STOP AQUATIC HITCHHIKERS!™

www.ProtectYourWaters.net

Zebra mussels encrusting a fishing rod



Zebra and quagga mussels are invasive freshwater mollusks (clams) that infest waters in large numbers, attaching to any hard surface.

Zebra mussels encrusting a boat motor

Zebra and quagga mussels are a nuisance for anglers and boaters. They can ruin your equipment, clog cooling systems in motorboats, foul hulls and jam the centerboard wells under sailboats.

In Western States You May also Report Zebra/Quagga Mussel Sightings to

Bonneville Power Administration's Crime Witness Hotline

1-800-437-2744

U.S. Fish & Wildlife Service

BONNEVILLE POWER ADMINISTRATION

100th Meridian Initiative

IMAGE CREDITS: *Zebra mussels encrusting a fishing rod* and *Zebra mussels on a fishing lure* by Marc Murrell, Kansas Department of Wildlife and Parks • *Zebra mussels, Zebra mussels on a beer can, Zebra mussels on a native mussel, Bait bucket: Before and After, Inspect Everything!* and *Zebra Mussel Distribution Map: July 2006* by David Britton, U.S. Fish & Wildlife Service • *Zebra mussels in a cut-away pipe* by Don Schlosser, Great Lakes Science Center, National Biological Service • *Zebra Mussels in a Pipe* by Craig Czarnecki, Michigan Sea Grant • *Zebra mussels encrusting a boat motor* by Steve Krynock - **MAP:** Distribution Map is based on data compiled by the U.S. Geological Survey available at www.NationalAtlas.gov - **DESIGN:** The design of this brochure is a modified version of an original design provided by Boat U.S. Clean Water Trust and ION Media DC.

100th Meridian Initiative

ZAP THE ZEBRA

www.100thMeridian.org

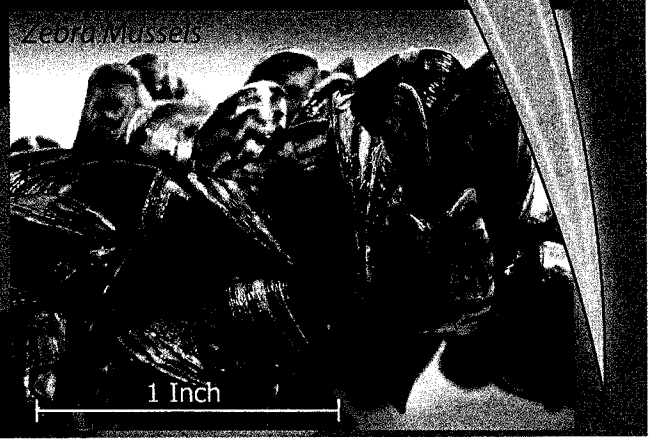
Please report any sightings by calling our National Hotline:

1-877-STOP-ANS

Quagga Mussels

1 Inch

Zebra Mussels

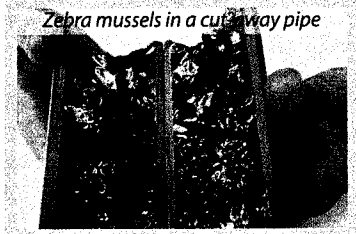


1 Inch

Invasive Mussels: Expensive Damage!

When zebra or quagga mussels invade our local waters they clog power-plant and public-water intakes and pipes. Routine treatment is necessary and very expensive! This leads to increased utility bills. If you use water and electricity, then you do not want zebra/quagga mussels!

Zebra mussels in a cut away pipe



Zebra/Quagga Mussels May Use Your Boat to Invade Additional Waters!

If your boat has been in infested waters, it could be carrying invasive mussels. The primary way that these mussels can spread to new habitats is on boats trailered by the public or by commercial haulers. Zebra and quagga mussels attach to boats and aquatic plants carried by boats. They also commonly attach to bait buckets and other aquatic recreational equipment. You could unintentionally transport microscopic larvae in water held in your live well, bilge, or bait bucket. An adult female zebra mussel can release up to 1,000,000 eggs each season. Please take the precautions outlined in this brochure to help reduce the chance that zebra or quagga mussels will spread to uninfested areas.

Before Zebras Mussels *After Zebra Mussels*

To prevent the spread of aquatic nuisance species such as zebra and quagga mussels, a comprehensive prevention partnership called the 100th Meridian Initiative has been developed to include state and federal agencies as well as private industries and user groups. Contact your state's natural resources agency, wildlife department, and/or watercraft registration office about the 100th Meridian Initiative and local efforts to prevent the spread of aquatic nuisance species by boats.

Zebra/Quagga Mussels Harm Native Aquatic Life

Zebra mussels on a crayfish

native mussel

Zebra/Quagga Mussels Encrust Any Hard Surface

Zebra mussels on a

Freshwater Zebra/Quagga Mussels!

Zebra and quagga mussels are the only freshwater bivalves in North America that encrust hard surfaces.

They are invasive species from the Black and Caspian Sea Drainages in Eurasia.

They may be microscopic or up to two inches long.

They commonly have alternating light and dark stripes, hence the common name "zebra" mussels.

They usually attach in clusters and have razor-sharp shells that can cut your hands and feet.